

## ABSTRACT

5

## R.F. Antenna Switch

An R.F. antenna switch (102) for coupling either a high-loss port (112) or a low-loss port (114) to a common port (110) includes an unequal power splitter (104) with the high-loss port (112), the low-loss port (114), and the common port (110). The unequal power splitter (104) further has at least one high-loss path (120) coupled between the common port (110) and the high-loss port (112) and a low-loss path (122) coupled between the common port (110) and the low-loss port (114). The R.F. antenna switch (102) further comprises a switching element (106) having an input (106A) coupled to the low-loss port (114) and an output (106B) coupled to a terminating element (108). The low-loss port (114) is terminated with the characteristic impedance of the unequal power splitter (104) when the switching element (106) is switched on.

25

30

35